

ABSTRACT

A solid state image pickup device in which an image pickup region composed of a plurality of light-receiving pixel portions 1 and a transfer register 2 for transferring in one direction the signal charges accumulated in the light-receiving pixel portions 1 is formed on the face layer portion side of a semiconductor substrate and which prevents the mixing of signals between the adjacent signals even in the case where an overflow barrier is formed at a deep position for the purpose of enhancing the sensitivity per unit area, wherein barrier regions 15 each being an impurity region continuing in a direction orthogonal to the transfer direction of the transfer register 2 over the entire region of the image pickup region are each formed at a position corresponding to a position between the light-receiving pixel portions 1 adjacent to each other in the transfer direction, whereby a sufficient potential barrier is formed and the mixing of signals is thereby prevented.